Appl. No. 10/069,680 Att. Docket No. 10191/2217 Reply To Final Office Action of 02/17/2004

## **REMARKS**

Claims 14 to 19, 21 and 24 to 29 are pending.

Applicants respectfully request reconsideration of the present application in view of this response under 37 C.F.R. § 1.116.

With respect to paragraph one (1) of the Final Office Action, it is respectfully requested that the Office confirm that the priority document(s) have not been received from WIPO. It is understood that the certified priority document(s) were properly provided to the WIPO International Authority, which should have provided the priority document(s) to the Office. If the Examiner confirms that they have indeed not been received, as they should have been, a copy of the certified copy of German Patent Application 100 30 354.4 filed in Germany on June 21, 2000 will be provided as necessary.

With respect to paragraph three (3) of the Final Office Action, claims 14 to 18, 21 and 24 to 29 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Siemens</u>, British Patent 900,774 in view of <u>Yajima</u>, United States Patent No. 4,336,215.

Claim 14 is to a thermoelectric component, and includes a first element and a second element, where the first element and the second element are in contact with each other in an area of at least one contact point, and where at least in one vicinity of the contact point, at least one of the first element and the second element includes a ceramic material. While the rejections may not be agreed with, to facilitate matters, claim 14 has been rewritten such that at least in one vicinity of the contact point, the ceramic material includes a filler of one of  $Cr_3C_2$ , FeCr, and FeCrNi. The recitation of carbides, nitrides, silicides and graphite has been removed.

Claim 29 is to a method, and includes the steps of providing a thermoelectric component, the thermoelectric component including a first element and a second element, the first element and the second element arranged in contact with each other in an area of at least one contact point, at least in one vicinity of the contact point, at least one of the first element and the second element including a ceramic material and arranging the thermoelectric component in one of a thermocouple configured to one of measure temperature and a Peltier element as one of a thermoelectric heating element and a cooling element. While the rejections may not be agreed with, to facilitate matters, claim 29 has been rewritten such that the ceramic material includes a filler of one of  $Cr_3C_2$ . FeCr, FeCrNi and graphite. The

NY01 679143 v 1 5

Appl. No. 10/069,680 Att. Docket No. 10191/2217 Reply To Final Office Action of 02/17/2004

recitation of carbides, nitrides, silicides and graphite has been removed.

As regards the obviousness rejections, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim feature and it must also provide a motivation or suggestion for combining the features in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)). Thus, the "problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem", Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998). It is believed and respectfully submitted that the prior art simply does not address the problems met by the subject matter of any of the rejected claims.

The Final Office Action admits that the <u>Siemens</u> reference does not describe (or even suggest) the presence of any filler materials placed in a ceramic material, where the filler material is one of Cr<sub>3</sub>C<sub>2</sub>, FeCr, and FeCrNi. (<u>See</u> Final Office Action page 3.) Similarly, <u>Siemens</u> does not provide a method pertaining to these filler materials.

The secondary <u>Yajima</u> reference does not cure the critical defects of the <u>Siemens</u> reference, since it only refers to mixing ceramic materials with semi-inorganic block copolymers, for example oxides such as Al<sub>2</sub>O, BeO, MgO, ZrO<sub>2</sub> or SiO<sub>2</sub>, carbides, nitrides, borides, and silicides or ternary or higher compounds of these. (Col. 6, lines 44 to 52.) The <u>Yajima</u> reference refers to additives for adding to ceramic substrates, such as MgO, NiO for Al<sub>2</sub>O<sub>3</sub>, CaO and TiO<sub>2</sub> for ZrO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub> for Si<sub>3</sub>N<sub>4</sub>, B, Si and C for SiC, Ni and WC for TiC, and ZrO<sub>2</sub> and CrB<sub>2</sub> for ZrB<sub>2</sub>. (Col. 5, lines 11 to 15.) The <u>Yajima</u> reference simply does not disclose (or suggest) the presence of Cr<sub>3</sub>C<sub>2</sub>, FeCr and FeCrNi, as provided for in the context of the claims.

As the combination of <u>Siemens</u> and <u>Yajima</u> does not disclose or suggest the features of amended claims 14 and 29 as presented, it is respectfully requested that the rejections of claims 14 and 29 be withdrawn.

Claims 15 to 18, 21, and 24 to 28 depend from claim 14 and are therefore allowable for at least the same reasons as claim 24.

With respect to paragraph four (4), claims 14 to 19, 21 and 29 were rejected under 35 U.S.C. § 103(a) as unpatentable over <u>Bachman</u>, United States Patent No. 2,981,775 in

NY01 679143 v 1 6

Appl. No. 10/069,680 Att. Docket No. 10191/2217 Reply To Final Office Action of 02/17/2004

view of the Yajima reference.

The Final Office Action admits that the <u>Bachman</u> reference does not disclose a filler material being one of  $Cr_3C_2$ , FeCr, and FeCrNi. Moreover, the <u>Bachman</u> reference does not describe (or even suggest) the presence of any filler materials placed in a ceramic material, in which the filler material is one of  $Cr_3C_2$ , FeCr, and FeCrNi. Similarly, <u>Bachman</u> does not provide a method pertaining to these filler materials.

The secondary <u>Yajima</u> reference does not cure the critical defects of the <u>Bachman</u> reference, since it only refers to mixing ceramic materials with semi-inorganic block copolymers, for example oxides such as Al<sub>2</sub>O, BeO, MgO, ZrO<sub>2</sub> or SiO<sub>2</sub>, carbides, nitrides, borides and silicides. The <u>Yajima</u> and <u>Bachman</u> references simply do not disclose (or suggest) the presence of Cr<sub>3</sub>C<sub>2</sub>, FeCr and FeCrNi, as provided for in the context of the claims. It is therefore respectfully requested that the rejections as to claims 14 and 29 be withdrawn.

Claims 15 to 19 and 21 depend from claim 14, and are therefore allowable for the same reasons as claim 14.

Accordingly, claims 14 to 19, 21 and 24 to 29 are allowable.

## **CONCLUSION**

In view of the above, it is believed that the rejections have been obviated, and it is respectfully submitted that claims 14 to 19, 21 and 24 to 29 are allowable. It is therefore respectfully requested that the rejections be reconsidered and withdrawn, and that the present application issue as early as possible.

Respectfully submitted,

Dated:

By:

Richard L. Mayer

(Reg. No. 22,490)

KENYON & KENYON

One Broadway

New York, New York 10004

(212) 425-7200

**CUSTOMER NO. 26646**